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Prepared in cooperation with the U.S. Geological Survey

GEOLOGIC MAP OF THE MARGARITA PEAK 7.5' QUADRANGLE SAN DIEGO COUNTY, CALIFORNIA: A DIGITAL DATABASE

VERSION 1.0

By
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Digital Database
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2001

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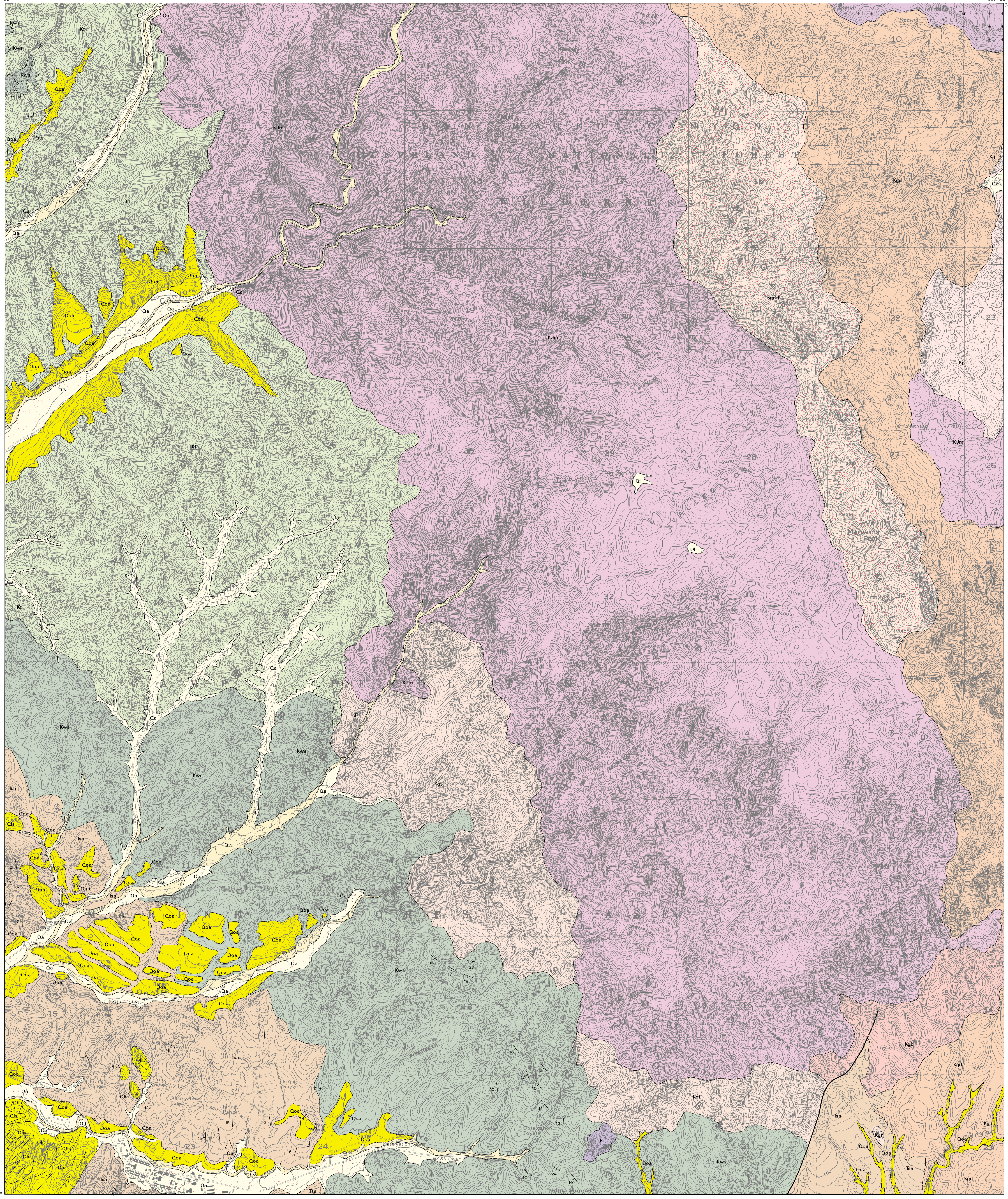
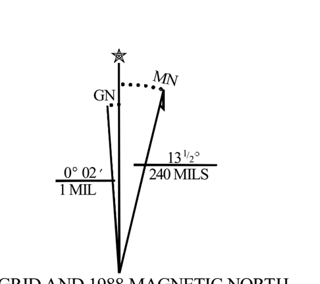
2. U. S. Geological Survey, Riverside, CA

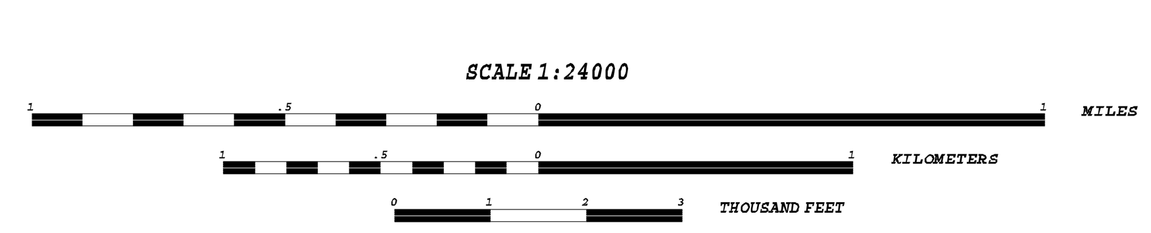
DEPARTMENT OF CONSERVATION
Division of
Mines and Geology



Topographic base by U.S. Geological Survey
7.5' Margarita Peak Quadrangle
Polyconic projection, contour interval 20 feet,
dotted lines 10 feet.



UTM GRID AND 1988 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET



This geologic map was funded in part by the U.S. Geological Survey National Cooperative Geologic Mapping Program, STATEMAP Award no. 00HQAG0120.

CORRELATION OF MAP UNITS

Units	Epoch	Period	Era
Qa, Qw, Ql, Qls	Holocene	QUATERNARY	CENOZOIC
Qoa, Qls	Pleistocene	QUATERNARY	CENOZOIC
Tsr, Tv	Miocene	TERTIARY	CENOZOIC
Tsa	Eocene	TERTIARY	CENOZOIC
Kws, Kt, Kgb, Kgt, Kgd, Kgd-f, Kg, KJm		CRETACEOUS	MESOZOIC
KJm		JURASSIC	MESOZOIC

MAP SYMBOLS

Contact between map units; generally approximately located.

Strike and dip of inclined sedimentary beds.

Landslide (Qls); arrow(s) indicate principal direction of movement, outline includes headscarp of landslide.

DESCRIPTION OF MAP UNITS

MODERN SURFICIAL DEPOSITS - Sediment that has been recently transported and deposited in channels and washes, on surfaces of alluvial fans and alluvial plains, and on hillslopes. Soil-profile development is nonexistant. Includes:

Qw — Active wash/stream deposits (late Holocene) - Along major drainage courses; unconsolidated gravelly sand with silt.

Ql — Active lake/lacustrine deposits (late Holocene) - Unconsolidated sandy silt with clay and gravel.

Qa — Active alluvial flood plain deposits (late Holocene) - Unconsolidated to locally poorly consolidated sand and gravel deposits in active alluvial flood plains.

Qls — Landslide deposits (Holocene to Pleistocene) - Landslide slump and rock fall deposits.

OLD SURFICIAL DEPOSITS - Sedimentary units that are moderately consolidated and slightly to moderately dissected. Older surficial deposits have upper surfaces that are capped by moderate to well-developed pedogenic soils. Includes:

Qoa — Older alluvial flood plain deposits (Pleistocene, younger than 500,000 years) - Mostly moderately well consolidated, poorly sorted, permeable flood plain deposits; sand, silt and clay.

BEDROCK UNITS

Tsr — Santa Rosa Basalt (Miocene) - Dark-gray and black, fine-grained basalt and agglomerate.

Tv — Volcanic rock undivided (Miocene) - Flows of dacitic composition.

Tsa — Santiago Formation (Eocene) - Marine sandstone with siltstone interbeds.

Kws — William Formation, Schultz Ranch Member (Cretaceous) - Marine conglomeratic sandstone with siltstone beds.

Kt — Trabuco Formation (Cretaceous) - Non-marine fanglomerate with unsorted subangular clasts.

Kg — Granite undivided (Cretaceous) - Mostly leucocratic granite; coarse to medium grained.

Kgd — Granodiorite undivided (Cretaceous) - Mostly hornblende-biotite granodiorite; coarse to medium grained.

Kgd-f — Fine-grained Granodiorite undivided (Cretaceous) - Mostly hornblende-biotite granodiorite.

Kgt — Tonalite undivided (Cretaceous) - Mostly hornblende-biotite tonalite; coarse-grained, light gray.

Kgb — Gabbro undivided (Cretaceous) - Mostly biotite-hornblende-hypersthene gabbro; coarse-grained, dark gray, massive.

KJm — Metavolcanic and metasedimentary rocks undivided (Cretaceous and Jurassic) - Low grade (greenschist facies) rocks that are in part coeval with and in part older than the Cretaceous plutonic rocks they lie in contact with.

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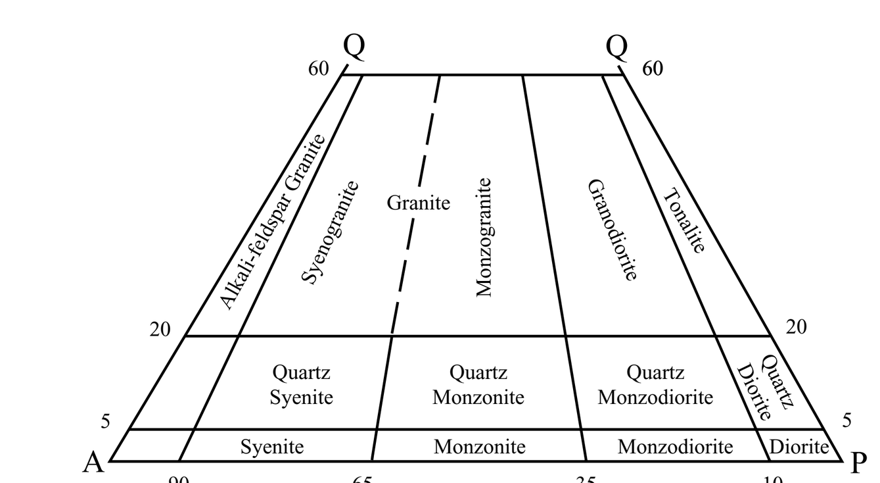

Classification of plutonic rock types (from IUGA, 1973, and *Streckeisen, 1973). A, alkali feldspar; P, plagioclase feldspar; Q, quartz.

*Streckeisen, A.L., 1973, Plutonic rocks--Classification and nomenclature recommended by the IUGA Subcommission on Systematics of Igneous Rocks: Geotimes, vol.18, pp.26-30.